

Mixed one

$$1. \frac{d}{dx} (x^3 + 4x^2 + 7x + 2)$$

$$2. \frac{d}{dx} \left(\frac{7}{x^{2/3}} \right)$$

$$3. \frac{d}{dx} \left(\frac{2x^2 - 3x + 1}{\sqrt{x}} \right)$$

$$4. \frac{d}{dx} (2x - 3)^2$$

$$5. \frac{d}{dx} (\sqrt{3x + 2})$$

$$6. \frac{d}{dx} (ax + b)(cx + d)$$

$$7. \frac{d}{dx} \left(\frac{2x + 5}{3x - 2} \right)$$

$$8. \frac{d}{dx} \left(\frac{3x + 2}{(x + 5)(2x + 1) + 3} \right)$$

$$9. \frac{d}{dx} \left(\frac{2x - 3}{3x + 4} \right)$$

$$a. \frac{-14}{3x^{5/3}}$$

$$b. c(ax + b) + a(cx + d)$$

$$c. \frac{-19}{(3x - 2)^2}$$

$$d. \frac{-6x^2 - 8x + 2}{(2x^2 + 11x + 8)^2}$$

$$e. 8x - 12$$

$$f. 3x^2 + 8x + 7$$

$$g. \frac{3}{2\sqrt{3x + 2}}$$

$$h. \frac{17}{(3x + 4)^2}$$

$$i. 3\sqrt{x} - \frac{3}{2\sqrt{x}} - \frac{1}{2x\sqrt{x}}$$